Mouse anti-Mouse; Rat ENaC alpha Monoclonal Antibody | anti-ENaC alpha antibody

ENaC alpha Antibody, Clone 2G4

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA103887	**Mouse**	**Mouse; Rat**	**Immunohistochemistry, Western Blot**

PRODUCT SYNONYMS

ENaC alpha; Monoclonal Antibody; ENaC alpha Antibody; Clone 2G4; Mouse Anti-Rat ENaC alpha Monoclonal IgG2b; SCNN1A Antibody; Epithelial Sodium Channel-alpha Antibody; Epithelial Sodium Channel alpha Antibody; Alpha ENaC 2 Antibody; Alpha ENaC Antibody; Alpha NaCH Antibody; Alpha-ENaC Antibody; Amiloride sensitive epithelial sodium channel alpha subunit Antibody; Amiloride sensitive sodium channel subunit alpha Antibody; Amiloride-sensitive sodium channel subunit alpha Antibody; ENaCa Antibody; ENaCalpha Antibody; Epithelial Na(+) channel subunit alpha Antibody; Epithelial Na+ channel subunit alpha Antibody; FLJ21883 Antibody; Nonvoltage gated sodium channel 1 subunit alpha Antibody; Nonvoltage-gated sodium channel 1 subunit alpha Antibody; SCNEA Antibody; SCNN 1 Antibody; SCNN1 Antibody; SCNNA_HUMAN Antibody; Sodium channel nonvoltage gated 1 alpha Antibody; anti-ENaC alpha antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Mouse; Rat
Clonality	Monoclonal
Isotype	IgG2b
Clone Number	2G4
Specificity	Detects ~85kDa.
Purity/Purification	Protein G Purified
Concentration	1 mg/ml (varies by lot)
Sequence Length	699
Applicable Applications for anti-ENaC alpha antibody	IHC (Immunohistochemistry), WB (Western Blot)
Target	ENaC alpha
Immunogen	Synthetic peptide from the N-terminal of Rat ENaC alpha (aa. 46-68)
Immunogen Species	Rat
Cellular Localization	Apical Cell Membrane
Conjugate	Unconjugated
Storage Buffer	PBS pH7.4, 50% glycerol, 0.09% sodium azide
Preparation and Storage	Store at -20 degree C.

IMAGES

WB (Western Blot)
Western Blot analysis of Mouse Whole kidney homogenates showing detection of ~85kDa ENaC alpha protein using Mouse Anti-ENaC alpha Monoclonal Antibody, Clone 2G4. Lane 1: Molecular Weight Ladder (MW). Lane 2: Low-salt diet. Lane 3: Normal-salt diet. Load: 20 ug. Primary Antibody: Mouse Anti-ENaC alpha Monoclonal Antibody at 1:1000. Predicted/Observed Size: ~85kDa.

IHC (Immunohistochemistry)
Immunohistochemistry analysis using Mouse Anti-ENaC alpha Monoclonal Antibody, Clone 2G4. Tissue: Kidney (cortex). Species: Mouse. Primary Antibody: Mouse Anti-ENaC alpha Monoclonal Antibody at 1:150. Localization: Collecting duct principal cells. Magnification: 60X.

ADDITIONAL INFORMATION

Related Product Information for anti-ENaC alpha antibody	The Epithelial Sodium Channel (ENaC) is a membrane ion channel permeable to Na+ ions. It is located in the apical plasma membrane of epithelia in the kidneys, lung, colon, and other tissues where it plays a role in trans epithelial Na+-ion transport (1). Specifically Na+ transport via ENaC occurs across many epithelial surfaces, and plays a key role in regulating salt and water absorption (2). ENaCs are composed of three structurally related subunits that form a tetrameric channel, alpha, beta, and gamma. The expression of its alpha and beta subunits is enhanced as keratinocytes differentiate (3, 4). The beta and gamma-ENaC subunits are essential for edema fluid to exert its maximal effect on net fluid absorption by distal lung epithelia(5). And it has been concluded that the subunits are differentially expressed in the retina of mice with ocular hypertension, therefore the up-regulation of alpha-ENaC proteins could serve as a protection mechanism against elevated intraocular pressure (6).
Product Categories/Family for anti-ENaC alpha antibody	Antibodies; Neuroscience; Ion Channels; Sodium Channels; Epithelial Sodium Channels (ENaC)
References	1. Kakizoe Y., et al. (2009) J Hpyertens. 27(8): 1679-1689. 2. Gu Y. (2008) J Cell Physiol. 216(2):453-457. 3. Bruns J.B. (2003) Am J Physiol Renal Physiol. 285(4): F600-F609. 4. Mauro T., et al. (2002) J Invest Dermatol. 118(4): 589-594. 5. Elias N., et al. (2007) Am J Physiol Lung Cell Mol Physiol. 293(3): L537-45. 6. Dyka F.M., May C.A. and Enz R. (2005) J Neurochem. 94(1): 120-128.

NCBI AND UNIPROT INFORMATION

NCBI GI #	13928742
NCBI GeneID	25122
NCBI Accession #	NP_113736
NCBI GenBank Nucleotide #	NM_031548.2
UniProt Accession #	Q6IRJ1; P37089
Molecular Weight	79,019 Da
NCBI Official Full Name	amiloride-sensitive sodium channel subunit alpha
NCBI Official Synonym Full Names	sodium channel epithelial 1 alpha subunit
NCBI Official Symbol	Scnn1a
NCBI Official Synonym Symbols	ENaCA
NCBI Protein Information	amiloride-sensitive sodium channel subunit alpha
UniProt Protein Name	Amiloride sensitive sodium channel alpha1 subunit
UniProt Gene Name	**Scnn1a**

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.